

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 501746WO	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/JP2004/015372	International filing date ( <i>day/month/year</i> ) 18 October 2004 (18.10.2004)	Priority date ( <i>day/month/year</i> ) 17 October 2003 (17.10.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant JTEKT Corporation		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 5 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 740 14 35	<table style="width: 100%; border: none;"> <tr> <td style="border-bottom: 1px solid black; padding-bottom: 5px;">Date of issuance of this report 20 June 2006 (20.06.2006)</td> </tr> <tr> <td style="padding: 5px;"> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Authorized officer</td> <td style="width: 50%; text-align: center; border: none;">Masashi Honda</td> </tr> <tr> <td colspan="2" style="border: none;">Telephone No. +41 22 338 70 10</td> </tr> </table> </td> </tr> </table>	Date of issuance of this report 20 June 2006 (20.06.2006)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Authorized officer</td> <td style="width: 50%; text-align: center; border: none;">Masashi Honda</td> </tr> <tr> <td colspan="2" style="border: none;">Telephone No. +41 22 338 70 10</td> </tr> </table>	Authorized officer	Masashi Honda	Telephone No. +41 22 338 70 10	
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# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

**TRANSLATION**  
**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **15.02.2005**

Applicant's or agent's file reference

**501746WO**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2004/015372**

International filing date (day/month/year)

**18.10.2004**

Priority date (day/month/year)

**17.10.2003**

International Patent Classification (IPC) or both national classification and IPC

**F16G5/18, F16H9/24**

Applicant

**JTEKT Corporation**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/015372

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/015372

**Box No. V** Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims	1-11	YES
	Claims		NO
Inventive step (IS)	Claims	5-10	YES
	Claims	1-4, 11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

**2. Citations and explanations:**

Document 1: JP 8-312725 A (Gear Chain Industrial B.V.),  
26 November 1996, claims 1, 4, fig. 3, 5,  
& US 5728021 A, & EP 741255 A1,  
& DE 69600141 C, & NL 1000294 C

Document 2: Microfilm of the specification and drawings  
annexed to the request of Japanese Utility  
Model Application No. 151198/1988 (Laid-open  
No. 71147/1990) (Mitsuboshi Belting Ltd.),  
30 May 1990, entire text, fig. 1-3

Document 3: JP 7-69001 B2 (Nissan Motor Co., Ltd.), 26  
July 1995, columns 4-5, fig. 6-10

Document 4: DE 4429223 C1 (Manfred Rattunde), 24 August  
1995, fig. 1-2

The inventions set forth in claims 1 and 11 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. A person skilled in the art could easily conceive of constituting the pins in the power transmission chain disclosed in document 1 so that the pins comprise a plurality of types having different stiffness characteristics, as with the chip units disclosed in document 2.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/015372

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

The invention set forth in claims 2 and 3 does not involve an inventive step in the light of document 1, together with either of documents 3 and 4 cited in the international search report. A person skilled in the art could easily conceive of constituting the pins in the power transmission chain disclosed in document 1 so that the pins comprise a plurality of types having different cross-sectional shapes or different cross-sectional area, as with the joint pins disclosed in documents 3 and 4.

The invention set forth in claim 4 does not involve an inventive step in the light of document 1 and document 4. A person skilled in the art could easily conceive of constituting the pins in the power transmission chain disclosed in document 1 so that pin width is broader the longer the pitch of a link, as with the joint pins disclosed in document 4.

The invention set forth in claims 5 to 10 is not disclosed in any of the documents cited in the international search report, nor would it be obvious to a person skilled in the art.